



Raymark Bulletin #38

February 2002



EPA Continues Evaluation of Soil Gas, Indoor Air and Groundwater

This bulletin discusses the upcoming fieldwork within the Town of Stratford

Introduction. This fact sheet provides an update on the third phase of soil gas and indoor air investigations and the next phase of groundwater investigation to be conducted in Stratford between February and August 2002.

EPA has conducted soil gas and indoor air sampling in Stratford over the past two years. Soil gas is a term describing gas that fills the tiny voids between soil particles. When groundwater is contaminated with VOCs (chemical compounds that evaporate readily to the atmosphere), the chemicals can change into a gas and move upward in the soil and into homes and buildings. Previous sampling has confirmed that this is occurring in some limited areas and EPA has installed ventilation systems in four buildings where contaminant levels were high enough to cause a concern for human health exposure. The VOCs that were detected in indoor air samples were 1,1-Dichloroethylene (1,1-DCE), Trichloroethylene (TCE), benzene, 1,1,1-Trichloroethane (1,1,1-TCA), and toluene.

EPA has been investigating the groundwater in Stratford for a number of years. The focus of the investigation has only recently narrowed to the area of contamination between the former Raymark Facility and the Housatonic River/Ferry Creek area. This will again be the focus area for the upcoming investigation.

Additional Soil Gas \ Indoor Air Investigation

Why again? This work is being proposed because the prior rounds of soil gas and indoor air sampling have indicated that the VOCs in groundwater are moving into the indoor air in some homes. This additional sampling is being conducted to refine the areas that may have exposure to contaminated vapors.

When? This third phase will be conducted beginning February 19 through early March 2002. The sampling is purposely being conducted now because contaminants in indoor air are likely to be present at their greatest concentrations when buildings are closed up during the winter months.

What's the problem? Indoor air and soil gas testing was conducted in 2000 and 2001. EPA found site-related contaminants in some yards and indoor locations sampled. Details of the results are discussed in Raymark Bulletins #34, #35, and #37 which are available at the Stratford Library and online at the EPA website. Additional investigation of these contaminants and their potential impacts on homes/buildings is needed to ensure protection of public health.

Where and how will this be done? EPA will collect soil gas samples from locations identified along streets and from around selected homes/buildings (see figure on back). Samples will be collected by hand or by drill rig using a tube and a pump to withdraw the vapors from the soil. These samples will be collected primarily within the residential area where the groundwater contamination has been identified and prior soil gas sampling has been done.

In addition, EPA plans to re-sample the 4 buildings where sub slab basement ventilation systems were installed to verify that the systems are working. EPA will also re-sample the other homes where some contaminants were present in the indoor air but did not exceed health standards. New locations in the vicinity will also be sampled. All sampling will be done with the voluntary consent of the homeowner.

Additional Groundwater Investigation

Why again? This phase of groundwater investigation will address the data gaps identified for the nature and extent of contamination in the Draft Final Remedial Investigation dated November 2000. A copy of this document is available in the library. This investigation will close the data gaps within the 500-acre study area prior to a decision by EPA and CTDEP on groundwater clean-up.

When? This work will be conducted from April to August 2002.

What's the problem? A groundwater plume has been identified beneath and downgradient of the former Raymark Facility property. Items that need further clarification include: the discharge of the plume into the Housatonic River and Ferry Creek, how fast the plume is moving, and the depth of the contaminants within the plume.

Where and /how will this be done? The work will be done along the eastern edge of Stratford – around the former Raymark Facility and near the Housatonic River. Work will consist of multiple drill rigs installing boreholes and monitoring wells within the streets. Some limited work will be done on private properties with the owner's permission. Each drill rig will have a number of workers and trucks associated with it. Work will be performed primarily from 7 a.m. to 6 p.m., Monday through Friday, and will be in compliance with the Town of Stratford work requirements (see figure for proposed locations – final locations will be determined in the field). This additional phase of work will also involve sampling of all the monitoring wells within the study area.

Who should you contact for more information?

Ron Jennings, EPA Project Manager

Phone: 617-918-1242 or (888) EPA-REG1 ext. 81242

Jim Murphy, EPA Community Involvement

Phone: 617-918-1028 or (888) EPA REG1 ext. 81028

Ron Curran, CTDEP Project Manager

Phone: 860-424-3764

Brian Toal, CT Department of Public Health

Phone: 860-509-7742

Elaine O'Keefe, Stratford Health Department

Phone: 203-385-4090

*EPA New England website
for past Raymark Bulletins:*

www.epa.gov/region01/superfund/sites/raymark/bulletin

